general practice. The lower MICs recorded for the beta-lactamase-producing *B. catarrhalis* strains in this study, compared to earlier findings (4), is probably due to the small inocula used. Apart from resistance to co-trimoxazole among a few strains of *H. influenzae* and pneumococci, the emergence of beta-lactamase-producing *H. influenzae* strains seems to be the most important clinical problem (3, 5). At our laboratory in the western

part of Sweden, the frequency of beta-lactamase-producing *H. influenzae* has increased from only a few strains found each year in the late seventies to approx. 4% in 1982 (6). A continuing increase will call for alternatives to ampicillin as the drug of first choice for *H. influenzae* infections.

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Campylobacter fetus ssp. *fetus* Bacteremia a Patient with Liver Cirrhosis

Campylobacter fetus ssp. *fetus* (= *C. fetus*), which was formerly called ssp. *intestinalis*, is a rare opportunistic pathogen in humans. Last year Ullmann et al. reported six new diseases caused by *C. fetus* (1). They also published results on its frequency, symptoms and bacteriological properties. 21% of the 200 known infections worldwide were fatal. It has been suggested that this was due in part to insufficient antibiotic therapy or no antibiotic therapy whatsoever (2). We are presenting a report on a patient with *C. fetus* bacteremia.

A 46-year-old man was known to be suffering from alcoholic liver cirrhosis for several years. He was admitted to hospital with melena and ascites. Clinical examination revealed gastrointestinal hemorrhage, ascites and left-sided pleural effusion. The underlying disease was alcoholic liver cirrhosis with hypertrophic erosive gastritis. On the day after admission he had chills and a fever of up to 39.2° C. After several blood cultures had been taken, therapy was started with 3 × 2 g ampicillin i. v. daily. After several hours his temperature dropped to 37° C; a paralytic ileus slowly developed, however. The ileus was treated successfully with infusions of dextranthenol and enemas. From the fifth day onwards there were no further complications.

After incubation for seven days under anaerobic conditions, *C. fetus* was isolated from a blood culture. The strain was identified as described elsewhere (1, 3, 4). Sensitivity testing was performed using the agar diffusion technique. The strain was very sensitive to cefalothin and resistant to nalidixic acid, known properties of *C. fetus*. Furthermore, the strain was sensitive to ampicillin, gentamicin, tetracycline, chloramphenicol, cefotaxime, clin-

damycin and erythromycin and resistant to mezlocillin and trimethoprim-sulfamethoxazole. After treatment with ampicillin for one week, two further blood cultures remained sterile. No campylobacter strain could be isolated from stool specimens, possibly due to oral therapy with neomycin for liver insufficiency from the first day of admission onwards. After three weeks a serum titer of 1:160 against *C. fetus* ssp. *fetus* and 1:40 against *C. fetus* ssp. *jejuni* was found using complement fixation. The source of infection remained unknown. The patient reported neither contact with animals nor consumption of raw meat. Early treatment with ampicillin probably prevented severe septicemia. The reason for the paralytic ileus remains unclear; the pathogenic action of endotoxins must be considered.

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